

REMARKS/ARGUMENTS

Favorable consideration of this application is respectfully requested. Applicant has amended claims 1, 19-23 and 28 and has cancelled claims 14-18 and 35-38. Favorable reconsideration of this application is, consequently, earnestly solicited in view of the following remarks.

In regard to the specification, Examiner indicated that the title of the invention is not descriptive and a new title that is clearly indicative of the invention to which the claims are directed is required. Applicant has amended the title to clearly describe the invention to which the claims are directed.

Claim Objection

Claim 19 was objected to because the claim does not end in a period. Claim 19 has been amended to overcome the objection.

Claim Rejection – 35 U.S.C. §102(b)

Claims 1-8, 14-23 and 28-38 were rejected under 35 U.S.C. §102(b) as being anticipated by U. S. Patent No. 6,812,500 B2 issued to Reeh et al. (Reeh).

The Reeh patent discloses a light-radiating semiconductor component that has (1) a radiation-emitting semiconductor body 1, (2) a luminescence conversion element (4, or 5), and optional encapsulation layers to form the semiconductor component that has an output in the visible light spectrum.

Claims 1 has been amended to clarify that the claim recites forming a visible light source for at least one of a general and a decorative lighting source. Claim 1 has been further amended to clarify that the upconversion material are located in a sample holder

having a reflective surface and that the visible light emission is reflected off the reflective surface and applied to a light fixture (Fig. 12).

While Reeh converts a light emission having a first wavelength to a visible light having a second wavelength, the visible light source is a semiconductor device. Reeh does not teach the use of a reflector for reflecting the visible light or applying the reflected visible light emission to a light fixture as a general light source or as a decorative light source. For these reasons, Applicant believes that amended claim 1 overcomes the 35 U.S.C. 102(b) rejection. Thus, removal of the rejection is requested.

In regards to claims 2-8, while Reeh teaches use of a diode laser as a light source, encapsulating the upconversion particles in p-PMMA, and a visible light including red, green, blue and white, respectively, Reeh does not teach the use of a reflector for holding the upconversion particles, reflecting the visible light or applying the reflected visible light to a light fixture. For the reasons provided in regard to claim 1, Applicant believes that claims 2-8 are allowable over Reeh and requests removal of the rejection.

In regard to claims 14-18, Applicant has canceled claims 14-18.

In regard to claim 19, Applicant has amended claim 19 to include reflecting the visible light from a reflector onto one of a lens and a second reflector, wherein a shape of the one of the lens and the second reflector focuses the reflected visible light in a beam angle. Applicant has further amended claim 19 to clarify that the beam of reflected light is applied to a light fixture as a general lighting source or as a decorative lighting source.

Reeh discloses a semiconductor device that uses conversion encapsulation to produce a visible light output. Because Reeh does not teach the use of a reflector for reflecting the visible light and applying the visible light beam to a light fixture as a

general lighting source or as a decorative lighting source, Applicant believes that amended claim 19 is patentable over Reeh. Thus, Applicant requests removal of the rejection.

In regard to claims 20-23, while Reeh teaches a visible light including red, green, blue and white, respectively, Reeh does not teach the use of a reflector for reflecting the visible light or applying the reflected visible light to a light fixture. For the reasons provided in regard to claim 19, Applicant believes that claims 20-23 are allowable over Reeh and requests removal of the rejection.

In regard to claim 28, Applicant has amended claim 28 to clarify that the visible light source for general and decorative lighting includes a reflector for reflecting the visible light emission and to add a means for focusing the visible light emission into a light fixture (Fig. 12) as at least one of the general lighting source and the decorative lighting source.

Reeh discloses a semiconductor device that uses conversion encapsulation to produce a visible light output. Because Reeh does not teach the use of a reflector for reflecting the visible light and applying the visible light beam to a light fixture as a general lighting source or as a decorative lighting source, Applicant believes that amended claim 28 is patentable over Reeh. Thus, Applicant requests removal of the rejection.

In regard to claims 29-34, while Reeh teaches use of a diode laser as a light source, rare earth doped crystalline host particles mixed with encapsulation materials, and a visible light including red, green, blue and white, respectively, Reeh does not teach the use of a reflector for holding the upconversion particles, reflecting the visible light or

applying the reflected visible light to a light fixture. For the reasons provided in regard to claim 28, Applicant believes that claims 29-34 are allowable over Reeh and requests removal of the rejection.

In regard to claims 35-38, Applicant has canceled claims 35-38.


Claim Rejection - 35 U.S.C. §103(a)

Claims 9-13 and 24-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Reeh in view of Zarling et al. U. S. Patent No. 5,698,397 (Zarling).

Claims 9-13 and 24-27 depend from independent claims 1 and 19, respectively. While Zarling teaches the use phosphor compositions for the purpose of improving the brightness of a lamp, Reeh in combination with Zarling fails to teach all of the limitations in amended claims 1 and 19. For the reasons provided in regard to claims 1 and 19, Applicant believes that claims 9-13 and 24-27 are allowable and requests removal of the rejection.

In view of the foregoing considerations, it is respectfully urged that claims 1-13 and 19-34 be allowed. Such action is respectfully requested. If the Examiner believes that an interview would be helpful, the Examiner is requested to contact the attorney at the below listed number.

Respectfully Submitted;



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